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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,960	07/15/2003	Giora Biran	IL920000076US1	7798
54856	7590	01/27/2006	EXAMINER	
LOUIS PAUL HERZBERG 3 CLOVERDALE LANE MONSEY, NY 10952			CASIANO, ANGEL L	
			ART UNIT	PAPER NUMBER
			2182	

DATE MAILED: 01/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/619,960	Applicant(s) BIRAN ET AL.	
	Examiner Angel L. Casiano	Art Unit 2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

The present Office action is in response to application dated 15 July 2003.

Claims 1-20 are pending.

***Drawings***

1. The drawings are objected to because black boxes need to be labeled as to their function:

- Figure 2, "30"
- Figures 6-8, "30", "70"
- Figure 10, "830"

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

- Figure 2, "connector 170" (see Page 6, line 21)
- Figure 3, "90" (see Page 8)
- Figure 5, "PLB 390" (Page 15, line 13)

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:

- Figure 2, "270"

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Specification***

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

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6. Claims 8, 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claims 8, 12 recite the limitation "communicating data between the host computer system and a data communications network" in reference to claims 1 and 10, respectively. However claims 1 and 10 are silent regarding a host computer. There is insufficient antecedent basis for this limitation in the claims.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for

establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yee et al. [US 6,466,581 B1] in view of Feuerstein et al. [US 2002/0083341 A1].

Regarding claim 1, Yee et al. teaches an apparatus (see Abstract) including a descriptor table (see Figure 3, "106",

"107"; col. 5, lines 30-34). This apparatus for controls flow of data (see col. 3, lines 43-47, "data stream") between first and second data processing systems (see col. 1, lines 15-20, "processor", "another processing unit") via a memory (see "106"), said descriptor table for storing a plurality of descriptors for access by the first and second data processing systems; and descriptor logic for generating the descriptors (see Figure 4, "200") for storage in the descriptor table.

However, Yee et al. fails to teach the descriptors including a branch descriptor comprising a link to another descriptor in the table. As for this limitation, Feuerstein et al. teaches a descriptor having a link to another descriptor in a table (see Page 3, paragraph 36 and Figure 2, "208").

At the time of the invention, one of ordinary skill in the art would have been motivated to combine the cited disclosures in order to implement a security function, which verifies the integrity of a requested resource, as taught by Feuerstein et al. (see Abstract).

As for claim 2, Yee et al. teaches a frame descriptor defining a data packet to be communicated between a location in memory and a second processing system, identifying a location in the memory (see col. 3, lines 43-49).



As for claims 3 and 4, Yee et al. teaches an apparatus for data transfer involving transfers of data from a processor to another processing unit (see col. 1, lines 15-20). However, the combination of references does not specify the memory comprising the descriptor table as part of a second or first processing system. As for this limitation, Yee et al. teaches the memory as part of Figure 1 (see "100"). Therefore, it would have been obvious to include it as part of the first or second processing units since Yee et al. teaches this as part of the same apparatus (see Figure 1, "102").

As for claim 5, Yee et al. fails to teach the descriptors including a branch descriptor comprising a link to another descriptor in the table. As for this limitation, Feuerstein et al. teaches a plurality of descriptors linked together (see Page 3, paragraphs 36-37, "cached descriptor", "formulated descriptor", "second descriptor"; Figure 2, "208"). At the time of the invention, one of ordinary skill in the art would have been motivated to combine the cited disclosures for the reasons stated above.

As for claim 6, Yee et al. fails to teach the descriptors table as comprising a cyclic list. As for this limitation,

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Feuerstein et al. teaches a plurality of descriptors linked together (see Page 3, paragraphs 36-37, "cached descriptor", "formulated descriptor", "second descriptor"; Figure 2, "208"). These descriptors are related in a cycle (see Figure 3). At the time of the invention, one of ordinary skill in the art would have been motivated to combine the cited disclosures for the reasons stated above.

As for claim 7, Yee et al. teaches a first data processing system comprising a host computer system (see Figure 1, "104").

As for claim 8, Yee et al. teaches a communication interface for communicating data between a host computer system and a data network (see col. 1, lines 15-38; Figure 1).

As for claim 9, the combination of Yee et al. in view of Feuerstein et al. teaches the limitations corresponding to the **apparatus** as claimed in claim 1, for controlling flow of data between the memory of the host computer system and the data communications interface. Furthermore, Yee et al. teaches a communication interface for communicating data between a host computer system and a data network (see col. 1, lines 15-38;

Figure 1) and therefore also teaches the **data processing system** having the apparatus.

Regarding claim 10, the combination of Yee et al. in view of Feuerstein et al. teaches the limitations corresponding to the **apparatus** as claimed in claim 1, for controlling flow of data between first and second data processing systems via a memory. Therefore, the combination of references teaches also teaches the **steps for the method** directed to the apparatus. Independent claim 10 is rejected under the same rationale.

As for dependent claims 11-16, the combination of references teaches also teaches the **steps for the method** directed to the apparatus, which was previously rejected in claims 2-5 and 7-8. Accordingly, dependent method claims 11-16 are rejected under the same rationale.

As for claims 17-18, the combination of Yee et al. in view of Feuerstein et al. teaches the limitations corresponding to the **apparatus** as claimed in claims 1 and 9, for controlling flow of data between the memory of the host computer system and the data communications interface. Therefore, the combination also teaches the **computer program product comprising a computer**

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usable medium having computer readable program code means embodied therein directed to the apparatus.

As for claim 19, the combination of Yee et al. in view of Feuerstein et al. teaches the limitations corresponding to the **method** as claimed in claim 10, for controlling flow of data between first and second data processing systems. Therefore, the cited combination also teaches the **article of manufacture** comprising a computer usable medium having computer readable program code means embodied therein for causing the controlling of the flow directed to the apparatus.

As for claim 20, the combination of Yee et al. in view of Feuerstein et al. teaches the limitations corresponding to the **method** as claimed in claim 10, for controlling flow of data between first and second data processing systems. Therefore, the cited combination also teaches the **program storage device** readable by machine tangibly embodying a program directed to the method as in claim 10.

### **Conclusion**

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

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- Melvin et al. [US 6697330 B1] teaches method and system for output flow control in network multiplexers.
- Gaddis et al. [US 5905729 A] teaches mapping a data cell in a communication switch.
- Freeman [EP 175398 A] teaches a device, which has memory portions divided into memory subportions, each portion defined by one descriptor and each subportion by a second descriptor.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angel L. Casiano whose telephone number is 571-272-4142. The examiner can normally be reached on 9:00-5:30 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on 571-272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alc

19 January 2006



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